

Program	Level		First cycle				
	Name of the program		All study programs				
COURSE							
Course title	Statistics I						
Course code	Semester	Course status	ECTS	Contact hours (L+AE+LE)			
AMAT260	IV	Mandatory course	5	2+1+2			
Lecturer							
Course Goals	An introduction to statistics						
Learning Outcomes	- application of statistics						
COURSE CONTENT							
<ul style="list-style-type: none"> - Examples of statistical problems. Statistical data. Concept and classification of statistical characteristics. Frequency distributions of features. Tabular and graphic representation of characteristics. - Measures of central tendency. Middle (arithmetic, geometric, harmonic). Median. Mod. Location measures (I quartile, III quartile). - Measures of variability. Span. Interquartile. Standard deviation. Moments. Data standardization. Shape measures (asymmetry and roundness coefficients). A measure of deviation from statistical independence in a contingency table. - Covariance and correlation coefficient. Scatter diagram. Regression direction. Method of samples. Sampling distribution. - Point estimations of parameters of normally distributed basic sets (method of moments and method of maximum credibility). - Interval estimation of parameters. Parametric statistical tests. Hypothesis testing of arithmetic mean, proportion, total and variance. Test power and OC curve. - Determining the size of the sample for the implementation of the test. Comparison of parameters of basic sets. Estimation of the difference of arithmetic means. - Testing of hypotheses about the difference of arithmetic means. - Statistical software SPSS. 							
LITERATURE							
<p>[1] Šošić, I.: Primijenjena statistika, Školska knjiga, Zagreb, 2004</p> <p>[2] Šošić, I., Serdar, V.: Uvod u statistiku, Školska knjiga, Zagreb, 2002</p> <p>[3] Wonnacott, T.H., Wonnacott, R.J.: Introductory Statistics for Business and Economics, 4/ed, John Wiley & Sons, New York, 1990</p> <p>[4] Berenson, M.L., Levine, D.M., Krehbiel, T. C.: Basic business statistics, Pearson Education International, 9/e, New Jersey, 2004</p>							
STUDENT WORKLOAD (hours in a semester)							
Lectures	30	Tutorial	45	Individual work	40	T o t a l	115
GRADING				REMARKS			
Criterion	Maximum points	Minimum points					
Midterm exam (Tests)	50	27,5					
Final exam	50	27,5					
T o t a l	100	55					